

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 07/28/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,772	09/26/2001	Ronald G. Butcher	60,298-397; ST231	1768
26096	26096 7590 07/28/2005		EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			NGUYEN, DANNY	
			ART UNIT	PAPER NUMBER
			2836	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/963,772	BUTCHER ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Danny Nguyen	2836				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) daywill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status	• •					
1) Responsive to communication(s) filed on <u>01 S</u>	1) Responsive to communication(s) filed on <u>01 September 2004</u> .					
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for alloward closed in accordance with the practice under E	·					
Disposition of Claims		· ·				
4) ⊠ Claim(s) 1,3-10 and 14-17 is/are pending in the 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1,3-10 and 14-17 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the		• •				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	,	, ,				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Application rity documents have been received u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) M Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)				

Application/Control Number: 09/963,772

Art Unit: 2836

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 09/01/2004 with respect to claim 1 have been considered but are most in view of the new ground(s) of rejection.

Claims 2, 11-13 are cancelled.

Claims 14-17 are added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 3-10, 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (USPN 5,690,475) in view of Culp III et al (USPN 5,975,854, hereinafter Culp).

Regarding claims 1, 3-6, 8, Yamada discloses a compressor assembly (fig. 1 and 4) comprises a compressor (1) driven by a motor (5), a protector (e.g. protector 20 shown in figure 4) for limiting operation of the motor (5) and activatable upon a predetermined condition, the motor protector having a switch (20f) that limits operation of the motor (col. 5, lines 33-53), the compressor, the motor and the protector being within a housing (e.g. housing in figure 1). Yamada does not teach a signaling device as claimed. Culp discloses a compressor (figures 1 and 2) comprises a protection module

Application/Control Number: 09/963,772

Art Unit: 2836

(84 in figure 7) comprises a signaling device (e.g. the alarm device, col. 4, lines 23-30) which is located outside the compressor housing, wherein the activation of the switch (e.g. the control relay 170) activates the signaling device (col. 6, lines 39-41), wherein the signaling device comprises a terminal post (116 and 118). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the protection circuit of Yamada to incorporate the signaling device as disclosed by Culp in order to provide indication problem such that the device is easy taken care.

Regarding claim 7, Yamada discloses the predetermined condition relates to an overload condition of the compressor (e.g. col. 5, lines 33-53).

Regarding claim 9, Yamada discloses the compressor (1) is a scroll compressor.

Regarding claims 10, 14-17. Yamada discloses a scroll compressor (fig. 1 and 4) comprises a compressor (1) driven by a motor (5), the compressor, the motor and the protector being within a housing (e.g. housing in figure 1), a pair of scroll elements (3a and 3b) inter-fitting to define compression chambers (9); a drive shaft (5b) driven by an electric motor having a stator (5c) and a rotor (5a), the shaft causing one of the two scroll members to orbit relative to the other; and a motor protector switch (20) mounted in conjunction with a winding of the stator, the motor protector switch including a switch (20f) which is selectively opened to stop operation of the electric motor (e.g. col. 5, lines 33-53). Yamada does not teach a signaling device as claimed. Culp discloses a compressor (figures 1 and 2) comprises a protection module (84 in figure 7) comprises a signaling device (e.g. the alarm device, col. 4, lines 23-30) which is located outside

Art Unit: 2836

the compressor housing, wherein the activation of the switch (such as the control relay 170) activates the signaling device (e.g. see col. 6, lines 39-41), the signaling device comprising a terminal post (terminals 116 and 118). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the protection circuit of Yamada to incorporate the signaling device as disclosed by Culp in order to provide indication problem such that the device is easy taken care (col. 4, lines 25-30).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/963,772 Page 5

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN 7/22/2005

> SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800